

## **IRRIGATION SOLUTION AND METHOD FOR INHIBITION OF PAIN AND INFLAMMATION**

### Abstract of the Disclosure

5 A method and solution for perioperatively inhibiting a variety of pain and  
inflammation processes at wounds from general surgical procedures including  
oral/dental procedures. The solution preferably includes at least one pharmacological  
agent selected from the group consisting of a mitogen-activated protein kinase  
(MAPK) inhibitor, an  $\alpha_2$ -receptor agonist, a neuronal nicotinic acetylcholine receptor  
10 agonist, a cyclooxygenase-2 (COX-2) inhibitor, a soluble receptor and mixtures  
thereof, and optionally additional multiple pain and inflammation inhibitory agents at  
dilute concentration in a physiologic carrier, such as saline or lactated Ringer's  
solution. The solution is applied by continuous irrigation of a wound during a  
surgical procedure for preemptive inhibition of pain and while avoiding undesirable  
side effects associated with oral, intramuscular, subcutaneous or intravenous  
15 application of larger doses of the agents.